1 VQE results Aer Estimator (With Shots)

(Full Hamiltonian) Double Well $\Lambda = 16$ COYBLA Max 10k Iterations

Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time
RA r1 rl	1e−01	10000	100/100	48	1.3899e+00	7.9864e−01	4.9828e−01	7.0665e+00	6.1749e+00	8.916e−01	02h 41m 22s
RA r1 rl	1e−02	10000	100/100	68	1.5397e+00	7.966e−01	6.4806e−01	6.5647e+00	5.6731e+00	-	03h 27m 11s
RA r1 rl	1e−03	10000	100/100	85	1.1283e+00	7.4966e−01	2.3666e−01	6.7462e+00	5.8546e+00	-	03h 58m 47s
RA r1 rl	1e−04	10000	100/100	105	1.4244e+00	8.4157e−01	5.3281e−01	6.799e+00	5.9074e+00	-	04h 57m 03s
RA r1 rl	1e−05	10000	100/100	119	1.2603e+00	7.299e−01	3.6872e−01	6.2919e+00	5.4003e+00	-	04h 49m 42s
RA r1 rl	1e−06	10000	100/100	135	9.0525e−01	7.9945e−01	1.3654e−02	8.0183e+00	7.1267e+00	-	05h 13m 32s
RA r1 rl	1e−07	10000	100/100	156	1.5255e+00	7.3928e−01	6.3387e−01	7.1365e+00	6.2449e+00	-	05h 39m 14s
RA r1 rl	1e−08	10000	100/100	172	1.3339e+00	8.0673e−01	4.4226e−01	7.2423e+00	6.3507e+00	-	06h 42m 51s
Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time

Table 1